

WHAT IS CLAIMED IS:

1. A prosthesis comprising a substrate and a polypeptide growth factor associated with the substrate, the polypeptide growth factor being effective to stimulate association of viable cells with the substrate.

2. The prosthesis of claim 1 wherein the polypeptide growth factor is bonded to the substrate with a crosslinking agent.

3. The prosthesis of claim 2 wherein the crosslinking agent comprises difunctional aldehydes.

4. The prosthesis of claim 3 wherein the difunctional aldehyde comprises glutaraldehyde.

5. The prosthesis of claim 1 further comprising an adhesive, the adhesive being associated with the polypeptide growth factor and the substrate.

6. The prosthesis of claim 5 wherein the adhesive comprises a resorbable material.

7. The prosthesis of claim 6 wherein the resorbable material comprises a fibrin glue.

8. The prosthesis of claim 1 wherein the substrate comprises tissue.

9. The prosthesis of claim 1 wherein the substrate comprises human tissue.

10. The prosthesis of claim 1 wherein the substrate is selected from the group consisting of porcine tissue, bovine tissue, kangaroo tissue, canine tissue and a combination thereof.

11. The prosthesis of claim 1 wherein the substrate comprises a synthetic substrate.

12. The prosthesis of claim 1 wherein the substrate comprises a bioresorbable material.

13. The prosthesis of claim 1 wherein the polypeptide growth factor comprises vascular endothelial growth factor.

14. The prosthesis of claim 1, wherein the polypeptide growth factor comprises Tat protein.

15. The prosthesis of claim 1 wherein the prosthesis comprises an artificial organ, a heart valve prosthesis, an annuloplasty ring, a stent, a pledget, suture, an electrical lead, a permanently in-dwelling percutaneous device, an AV shunt, a vascular graft, a dermal graft or a surgical patch.

16. A method for associating endothelial cells with a substrate, the method comprising contacting a prosthesis of claim 1 with a cell culture comprising endothelial cells.

17. A method for distributing a medical article for use by health care professionals, comprising placing a prosthesis of claim 1 into a package under sterile conditions and distributing the package for use by health care professionals.

18. A method for producing a biocompatible material, the method comprising:
adhering a polypeptide growth factor to a substrate under conditions such that the polypeptide growth factor is effective to stimulate association of viable cells with the substrate.

19. The method of claim 18, wherein the adhering of the polypeptide growth factor to the substrate comprises crosslinking.

20. The method of claim 19, wherein the crosslinking of VEGF is performed with glutaraldehyde.

21. The method of claim 19 wherein the crosslinking of VEGF is performed for less than about 1 hour.

22. The method of claim 19 wherein the crosslinking of VEGF is performed for greater than about 24 hours.

23. The method of claim 18 wherein the substrate comprises tissue.

24. The method of claim 23 wherein the tissue is crosslinked tissue.

25. The method of claim 23 wherein the tissue is uncrosslinked tissue.

26. The method of claim 18 wherein the substrate comprises human tissue.

27. The method of claim 18 wherein the substrate comprises porcine tissue, bovine tissue, kangaroo tissue, canine tissue, or a combination thereof.

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